The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 20

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

PAT & T.M. OFFICE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte DOMINIQUE D. MESSERLI and DAVID C. PAUL

Appeal No. 2003-1395 Application No. 09/497,123

ON BRIEF

Before WALTZ, KRATZ, and PAWLIKOWSKI, <u>Administrative Patent</u> <u>Judges</u>.

WALTZ, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the primary examiner's final rejection of claims 1, 2, 7, 9, 14, 15 and 17 through 19. Claim 4 is the only other claim pending in this application and stands withdrawn from further consideration by the examiner as drawn to a non-elected invention (final Office action dated Oct.

^{&#}x27;Appellants' amendment subsequent to the final rejection was refused entry by the examiner (see the amendment dated Jan. 28, 2002, Paper No. 10, refused entry as per the Advisory Action dated Feb. 28, 2002, Paper No. 11; see also the Brief, page 2).

26, 2001, Paper No. 8, page 2). The examiner has indicated that the rejections involving claims 18 and 19 have been withdrawn, and thus the examiner objects to these claims as being dependent on a rejected claim but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims (Answer, page 3, ¶(3) and ¶(6)). Accordingly, claims 1, 2, 7, 9, 14, 15 and 17 remain as the claims on appeal (Reply Brief, page 1). We have jurisdiction pursuant to 35 U.S.C. § 134.

According to appellants, the invention is directed to an end member for use with a bone fusion implant (Brief, page 2).

Representative independent claim 1 is reproduced below:

- 1. An end member for use with an implant for fusing bone comprising:
- a first portion with a top surface adopted and configured to engage the bone and having an edge and a first channel extending from the edge for receiving a surgical instrument;
- a second portion configured and dimensioned to be inserted into a bore of the implant; and
- a shoulder joining the first and second portions and sized to rest on an edge of the implant when the second portion is inserted in the bore of the implant.

Appellants state that claims 1, 7, 9, 14, 15, 17 and 19 stand or fall together, with claim 2 and claim 18 standing alone (Brief, page 4). We note that claim 18 is not the subject of any

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rejection on appeal and thus its separate grouping is immaterial (Reply Brief, page 2). Contrary to the examiner's assertions (Answer, page 3), appellants do present reasonably specific, substantive reasons for the separate patentability of claim 2 (e.g., Brief, page 6). Therefore we select claim 1 as representative of the first group of claims and consider claim 2 separately to the extent of appellants' arguments. See 37 CFR § 1.192(c)(7)(2000); In re McDaniel, 293 F.3d 1379, 1383, 63 USPQ2d 1462, 1465 (Fed. Cir. 2002).

The examiner relies upon the following references as support for the rejections on appeal:

Biedermann et al. (Biedermann) 5,702,451 Dec. 30, 1997

Rabbe et al. (Rabbe) 5,776,197 Jul. 07, 1998

Claims 1, 7, 9, 14, 15 and 17 stand rejected under 35 U.S.C. § 102(b) as anticipated by Biedermann (Answer, page 4). Claims 1, 2, 9 and 14 stand rejected under 35 U.S.C. § 102(e) as anticipated by Rabbe (Answer, page 5). We affirm both of the examiner's rejections for reasons stated in the Answer and those reasons set forth below. Accordingly, the decision of the examiner is affirmed.

OPINION

A. The Rejection over Biedermann

The examiner finds that Biedermann discloses an end member with a top surface "adopted and configured to engage bone" as shown in Figure 3 since the end member has holes for tissue ingrowth and permits bone to be "pushed into it." Answer, page The examiner further finds that Figure 6 of Biedermann illustrates an end member having a flat planar surface, with two sections 12 and 19 that can be construed as first and second portions, with an integral shoulder that supports teeth 15 and "is sized to rest on and [sic, an] edge of the implant." The examiner further cites Figure 7 of Biedermann, interpreting the figure as showing a first channel extending from the edge such that it is formed between the teeth 15 that protrude outward from the edge, said channel being capable of receiving a surgical instrument. Id. We agree.

Appellants argue that the holes 14 in Biedermann are circular in shape and are located on the interior of the plate, spaced a distance from the edge of the top surface, and thus do not form a channel or longitudinal groove for receiving a surgical instrument. This argument is not well taken since the examiner does not rely upon the holes 14 as forming a "channel"

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(see the Answer, page 4). Similarly, appellants' argument that the examiner cites the space between prongs 21 as a "channel" is not well taken (Brief, page 5).

Appellants argue that the examiner does not show a top surface having a channel as expressly recited in claim 1, merely citing Figure 7 of Biedermann to purportedly show a channel formed between the teeth 15 that protrude outward from the edge (Reply Brief, pages 2-3). This argument is not persuasive since claim 1 on appeal does not require a top surface having a channel. The end member of claim 1 on appeal comprises a first portion "with a top surface ... having an edge and a first channel extending from the edge...". Claim language, in its ordinary usage, must be given its broadest reasonable interpretation during ex parte prosecution, as it would have been understood by one of ordinary skill in the art when read in light of the specification. See In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). The language quoted above from claim 1 on appeal does not require a longitudinal channel, or a channel on the top surface, but merely a channel extending from an edge of the top surface. A "channel" is formed between adjacent noses or teeth 15 of Biedermann, with the channel extending from the edge of ring 12, which is an edge of the top

surface of the ring, with the channel extending in a downward direction (see Figures 2, 3 or 3A).

In view of the foregoing claim construction and interpretation of Biedermann, we determine that the examiner has shown an end member of Biedermann with a first and second portion, the first portion having an edge and a first channel extending from the edge, a second portion configured and dimensioned to be inserted into the bore of the implant (see col. 3, 11. 1-8), and a shoulder joining the first and second portions sized to rest on an edge of the implant (see Figure 6). The intended capability of the first channel ("for receiving a surgical instrument") is clearly within the capability of the channel shown by Biedermann. See In re Schreiber, 128 F.3d 1473, 1477-78, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

For the foregoing reasons and those stated in the Answer, we determine that the examiner has established a *prima facie* case of anticipation which has not been sufficiently rebutted by appellants' arguments. Accordingly, we affirm the examiner's rejection of claim 1, and claims 7, 9, 14, 15 and 17 which stand or fall with claim 1, under 35 U.S.C. § 102(b) over Biedermann.

B. The Rejection over Rabbe

The examiner finds that Rabbe, as shown in Figure 3, discloses an end member 22 for a bone implant having a first portion 35 and a second portion 37 with a shoulder integral with the first portion and capable of being sized to rest on an edge of the implant (Answer, page 5). The examiner further finds that the top surface of the end member of Rabbe is a flat planar surface that has first and second channels 47 extending from an edge and these channels are fully capable of receiving an instrument. *Id.* The examiner also notes that Rabbe teaches a plurality of teeth 120 in a two dimensional array on the top surface. *Id.*

Appellants argue that element 35, which the examiner alleges to be a shoulder, is not sized to rest on an edge of the implant since flange 35 has internal threading which goes outside of threaded cylindrical body 21, with flange 35 never contacting body 21 (Brief, pages 5-6; Reply Brief, page 4). This argument is not persuasive since Rabbe teaches that the threading can be reversed, i.e., the internal threads may be on the cylindrical body 21 while the external threads may be on the cylinder 37, thus resulting in a cylindrical body 21 slightly larger in diameter than the diameter of the cylinder 37 (see col. 7, 11.

10-16). Therefore the flange 35 would be sized to rest on an edge of the implant cylinder 21.

Appellants argue that Rabbe does not disclose, teach or suggest a "first channel" in the top surface "extending from the edge for receiving a surgical instrument" as required by claim 1 since the mounting slots 47 disclosed by Rabbe are configured to support a separate end cap 23 which would prevent a surgical instrument from being received in slots 47 (Brief, page 6; Reply Brief, page 3). This argument is not persuasive since Rabbe teaches that the end cap 23 "can be eliminated if bone growth between the adjacent vertebrae and through the replacement body is preferred." Col. 6, 1. 65-col. 7, 1. 2. Thus mounting slots 47 would clearly be capable of receiving a surgical instrument. See In re Schreiber, supra.

With respect to the rejection of claim 2 on appeal, appellants argue that teeth 91 in Rabbe form a single ring and not a two dimensional array as claimed (Brief, page 6; Reply Brief, page 4). This argument is not well taken since the spikes 91 taught by Rabbe must be considered as at least a "two dimensional array" as this language is ordinarily used (Answer, page 6). Furthermore, Rabbe teaches that the end face 86 of the flange 85 includes "a number of spikes 91 projecting therefrom"

with the configuration to penetrate the end plate of the adjacent vertebral bodies "to help maintain the position of the implant in situ" (col. 9, 11. 48-52). Accordingly, Rabbe describes any number of spikes in any configuration necessary to maintain the implant in position.

For the foregoing reasons and those stated in the Answer, we determine that the examiner has established a *prima facie* case of anticipation in view of Rabbe which has not been sufficiently rebutted by appellants' arguments. Accordingly, we affirm the examiner's rejection of claims 1 and 2, and claims 9 and 14 which stand or fall with claims 1 and 2, under 35 U.S.C. § 102(e) over Rabbe.

No time period for taking any subsequent action in connection with this appeal may be extended under $37\ \text{CFR}$ \$ 1.136(a).

AFFIRMED

Thomas A. Waltz

Administrative Patent Judge

Peter F. Kratz

Administrative Patent Judge

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Beverly A. Pawlikowski Administrative Patent Judge

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Pennie & Edmonds LLP 1667 K Street, N.W. Suite 1000 Washington, DC 20006